California's Health

Vol. 13, No. 2 · Published twice monthly · July 15, 1955

STATE-FEDERAL RELATIONSHIPS IN THE FIELD OF PUBLIC HEALTH*

LEROY E. BURNEY, Deputy Chief, Bureau of State Services, Public Health Service, U. S. Department of Health, Education and Welfare, Washington, D. C.

It is always a pleasure to come to California, not only because I like the State and have many friends here, but also because, with your progressive public health programs, you have much to offer in terms of inspiration as well as information to anyone in the public health field.

Ever since I was state health officer of Indiana, I have felt—and I believe the health officers of all states feel the same way—a great admiration and respect for the work you are doing and for the leadership which you have provided not only to your own State, but to the whole Nation.

In the area of local health services, particularly, you have found solutions to many of the problems that are still matters of serious concern to other states. I hope they will learn more about what you are doing here, for I know it would be an inspiration to them.

I wish I could spend this time asking you questions about your local health programs rather than trying to sell you anything, but I realize that you have questions too and that you expect me to answer some of those which pertain to federal-state relations. Consequently, I will try to outline the relationship of the Public Health Service to state agencies and to discuss some of our mutual problems.

States Are Sovereign

In the Public Health Service, we have always recognized that states are sovereign in matters of health. Public health is a responsibility of state and local government. The Federal Government has direct responsibility only in relation to interstate health problems, national parks, government reservations, etc. The areas of our responsibility are demarcated by the provisions of the Constitution of the United States, including that section which states that the Federal Government has an interest in the welfare of the people as a whole.

Throughout the history of the service, Public Health Service personnel have always assumed that their primary responsibility was to work with and through state officials to help in any way possible but not to interfere with state sovereignty. I believe that is an important concept and is one of the reasons why state-federal relationships in the field of public health have always been harmonious. We have assumed that our responsibility to you is on the basis of providing nation-wide leadership on various health problems. We have also been able to profit, and perhaps help in the states in a little way, by loaning personnel to states and, through states, to local health departments. I believe this has benefited the states as well as the local communities and I am sure it has provided an enriching experience to Public Health Service officers.

Research at Federal Level

In addition to providing direct services to states, the Public Health Service is responsible for a certain amount of research—both basic research, which is done at the National Institutes of Health; and applied research, which is carried out through demonstrations and pilot studies, often in cooperation with state and local health agencies.

Public health in this Country has developed rather rapidly since 1895 or thereabouts. The Federal Government has assisted in this development by research, by making grants-in-aid to states, and by providing consultant and other services. Unfortunately, we have often lacked, and still lack, enough good people to give as much help as we would like to give. We need more young men in the Public Health Service, but we have had considerable difficulty in getting them. State and local agencies, I am sure, face a similar problem. For every trained and competent young man, there are many jobs, both in and out of the field of public health.

Competition for Funds

Similarly, there is keen competition for the dollars to finance public health. There has been a decrease in federal funds in the last few years, as you all know. And in many states, demands for funds for education, highway construction, welfare, and other good causes limit the amount of state revenue available for public health.

But perhaps competition from other fields is not the only reason public health is finding it difficult to secure the personnel and funds it needs. Another reason may be that the public still tends to think of the public health department solely in terms of what it can do to promote sanitation and to control communicable diseases. Both of these traditional activities are important, but they are less important

* Excerpts from a talk given at the annual spring meeting of the California Conference of Local Health Officers, Berkeley, May 5-6, 1955.

than they used to be and consequently cannot be expected to retain the high degree of public concern that they once received. True, our gains in general sanitation are somewhat offset by mounting problems of stream pollution from industrial waste and by air pollution, including radiological pollution. True also, communicable diseases continue to take an unnecessarily high toll of lives each year.

Today's Major Health Problems

Nevertheless, the fact remains that today's major health problems are quite different from those that can be tackled simply by communicable disease control and sanitation programs. To solve these newer problems, we must work together with other groups more intensively than we have ever done before. As we do so, and as we demonstrate our effectiveness in dealing with the health problems people are most concerned about, I think we will find that the obstacles which often seem so serious now will begin to disappear.

One example of where a cooperative approach can be dramatically successful—due to recent advances in physical medicine—is rehabilitation. In the Federal Government, the principal agency dealing with rehabilitation is the Office of Vocational Rehabilitation which, like the Public Health Service, is a unit of the Department of Health, Education and Welfare. Because we are in the same agency and physically located in the same building, it has been relatively easy for us to develop a close, cooperative relationship. In the states, where the rehabilitation agency is often entirely separated from the health department, it may not be so easy, but I believe you will agree that it is equally essential and well worth whatever effort it may take in terms of establishing joint committees and working together on joint projects. Nor can we stop at the state level. Voids exist at the local level which can only be filled through teamwork.

Mental health is another field where cooperation is important if more emphasis is to be placed—as I believe it should be—on prevention as well as cure. In cooperation with welfare agencies, departments of education, and many voluntary groups, the health department can do much to promote sound mental and emotional health.

The whole area of chronic diseases also needs far more attention than it has received—from health departments and from other interested groups. California is doing notable work in this field but it is not being duplicated in some of the other areas of the Country. For that very reason, you can provide valuable leadership and needed information. What is a chronic disease problem? Who are the people with these problems—what ages, what sex, what diagnoses? What is your experience in working with hospitals and local medical societies on chronic disease programs?

In the Public Health Service, we have a special unit on chronic diseases which is responsible for developing a chronic disease program. The people in this unit find themselves dealing chiefly with voluntary groups because state and local health departments—although they have facilities for meeting some of the needs that the voluntary groups are unable to meet—have not developed programs. If we had more knowledge about what you are doing, we could pass this on to other states and communities and I am sure they would find it both stimulating and helpful.

In many other states also, we have found that a rather discouraged attitude prevails in relation to developing local health services. This is particularly true in the Midwest and New England areas. There seems to be some tendency to think that the state can carry on local health services more cheaply and effectively than the local units of government and to overlook the fact that, since the people and their health problems are in local communities, the services they need must be as close to them as possible. Here is another field in which you can give nation-wide leadership. Other parts of the country need to know more about your local health services and how much they are accomplishing.

Time to Take a Fresh Look

Perhaps the time has come in public health when we need to take a fresh look at the health needs of the people, and at what we are doing to fulfill those needs. Are we doing what we feel is most important or is our program really geared to the things that the people feel are most important? Are we putting priorities on yesterday's urgencies or today's?

California is unquestionably pioneering in meeting many of the problems of today. But here, as everywhere, including Washington, D. C., we need to re-examine very often what we are doing. Public health will leave its present plateau and begin to climb again as it increasingly demonstrates its effectiveness in preventing those diseases which modern man most fears.

Samuel J. Crumbine Awards Announced By Paper Cup Institute

Two annual national awards have been established by the Public Health Committee of the Paper Cup and Container Institute in honor of the late Dr. Samuel J. Crumbine, pioneer public health officer and campaigner against the common drinking cup. Dr. Crumbine died in 1954 at the age of 92.

One of the Samuel J. Crumbine awards will be offered for "outstanding achievement in the development of a comprehensive program of environmental sanitation" and the other for "outstanding achievement in the development of a program of eating and drinking sanitation."

Competition for the awards is open to the nearly 1,150 local health units in the Nation. Each award to a winning health unit will consist of a bronze medal and engraved plate mounted on a walnut plaque. In addition, the health officer and the person or persons most directly responsible for the winning program under him will each receive a duplicate of the bronze medal.

Awards offered this year will cover programs or activities in progress or completed in 1955. Entries must be submitted prior to September 15, 1955, and the presentations will be made at one of the annual professional meetings in the fall. Applications should be obtained from the Public Health Committee, Paper Cup and Container Institute, 250 Park Ave., New York 17.

Judging will be done by an Awards Jury of six persons. One Californian, Walter S. Mangold, Associate Professor of Public Health, University of California, Berkeley, serves on the committee.

THE STORY OF RETROLENTAL FIBROPLASIA

ARTHUR H. PARMELEE, JR., M.D.*

Retrolental fibroplasia is at the present time the commonest cause of blindness in infants and young children. In California in 1954 there were known to be at least 500 blind preschool children of whom 70 to 80 percent were blind due to retrolental fibroplasia, and there undoubtedly are many cases not known to official agencies.

This condition has probably been noted in isolated cases for many years. There are case reports in the literature in the 19th century of what would in retrospect seem to be retrolental fibroplasia in premature infants. They were generally considered to be cases of persistent hyaloid artery and tunica vasculosa lentis or retinoblastomas at that time. Terry [1,2] is generally credited with discovering retrolental fibroplasia, or at least defining it as a clinical entity and relating it to prematurity. At first he too thought it might be the result of a persistent and over-grown hyaloid artery, but he was not certain of this. In 1941 he saw several cases of this condition. The cases he saw were all far advanced in their ocular pathology and were generally six months of age or more, but were known to have been born prematurely. He coined the name retrolental fibroplasia because he wanted to use a term that described the condition, but did not imply a known etiology. What he saw in each case was a fibrous mass behind the lens, hence the name. It has been a useful name that we continue to use to describe a clinical entity which now includes many stages of development before the condition progresses to the advanced stage of a mass behind the lens.

After Terry's [1,2] first description of the condition in prematures in 1942, many other clinicians began to find cases in all parts of the country. At first it was believed these cases were being noted simply because of the attention directed toward the condition. However, after careful surveys were made of clinic and hospital records, it became apparent that the condition retrolental fibroplasia was indeed an increasingly prevalent problem. In some areas where the eyes of all premature infants were carefully studied, the incidence of the condition was known to increase during the period of study. Some thought that the in-

* Assistant Professor of Pediatrics, University of California School of Medicine, Los Angeles, California, and member of the Ad Hoc Advisory Committee on Retrolental Fibroplasia, California State Department of Public Health.

STATEMENT ON OXYGEN ADMINISTRATION AND RETROLENTAL FIBROPLASIA

The Department's Ad Hoc Advisory Committee on Retrolental Fibroplasia has issued a statement on the causal relationship between oxygen administration and retrolental fibroplasia, which evidence has implicated as an important cause of blindness in prematures. This statement, urging adoption of recommended policies by hospitals caring for the newborn, has been distributed by the department to all physicians and those hospitals of the State which have maternity services. The policies, as they appear in the statement, are reprinted in this issue, along with Dr. Parmelee's article on the subject.

It is strongly urged that the following policies with respect to oxygen administration be adopted at once by all hospitals caring for the newborn:

1. Oxygen should be administered to premature infants only on the specific order of a physician.
2. Oxygen should not be administered in concentrations exceeding 40 percent, and should be discontinued as soon as the infant's condition permits. Cyanosis and respiratory distress may occasionally require oxygen concentrations exceeding 40 percent for short periods of time.
3. The prescription for continued oxygen therapy should be renewed daily by the physician.
4. The actual concentration of oxygen during administration should be checked with an oxygen analyzer at least every eight hours.
5. When oxygen is administered for periods longer than three days, the oxygen concentration should be measured more frequently to be sure that it never exceeds 40 percent.
6. The continuous administration of oxygen for periods in excess of three days should be prescribed only in exceptional circumstances.

The Advisory Committee on Retrolental Fibroplasia is as follows:

John A. Anderson, M.D., Professor of Pediatrics, Stanford University School of Medicine
Robert F. Chinnock, M.D., Clinical Professor of Pediatrics, College of Medical Evangelists
Peter Cohen, M.D., Associate Professor of Pediatrics, University of California Medical School
William C. Deamer, M.D., Professor of Pediatrics, University of California Medical School
Theodore H. Goldman, M.D., Assistant Clinical Professor of Pediatrics, College of Medical Evangelists
Margaret Henry, M.D., Assistant Clinical Professor of Ophthalmology, University of California
S. Rodman Irvine, M.D., Associate Clinical Professor of Surgery (Ophthalmology) U. C. L. A.
A. E. Maumenee, M.D., Professor of Surgery (Ophthalmology), Stanford University School of Medicine
Charles E. McLennan, M.D., Professor of Obstetrics and Gynecology, Stanford University School of Medicine
Daniel Morton, M.D., Professor of Obstetrics and Gynecology, U. C. L. A.
Edmund W. Overstreet, M.D., Associate Professor of Obstetrics and Gynecology, University of California
Arthur H. Parmelee, Jr., M.D., Assistant Professor of Pediatrics, U. C. L. A.
James F. Rinehart, M.D., Professor of Pathology, University of California Medical School
Keith P. Russell, M.D., Clinical Instructor in Obstetrics and Gynecology, University of Southern California
Ralph J. Thompson, Sr., M.D., Professor of Obstetrics and Gynecology, College of Medical Evangelists
Harold F. Whalman, M.D., Professor of Ophthalmology, College of Medical Evangelists
Warren A. Wilson, M.D., Associate Clinical Professor of Surgery (Ophthalmology), University of Southern California

creased incidence of retrolental fibroplasia might be explained by the decrease in mortality especially among smaller prematures who are most commonly afflicted by the disease. Although there has been general improvement in the care of prematures and a reduction in mortality in the smaller babies, this by no means compares with the increased incidence of retrolental fibroplasia.

Early Theories

Once the fact was fairly well established that there was a true clinical entity that could be called retrolental fibroplasia and that it was a condition that had increased in recent years and that it occurred only in premature infants the search for the etiology of this condition began in earnest. There seemed to be two major possibilities. The first was the possibility that something was occurring during the pregnancies of some mothers that caused them to have premature infants with abnormally developing eyes. The second possibility seemed to be that something was happening to or being done to premature infants in the premature nurseries that was not so before recent years.

Studies Initiated

Many clinical studies were initiated in all directions. These included studies of prenatal and postnatal factors of all kinds. There were many arguments as to whether this condition was caused prenatally or postnatally. Clinically it was eventually established that there were no relationships to the mother's age, race or prenatal health and there was no familial tendency or other evidence of hereditary factors.

Every item of premature care was also carefully reviewed, especially factors that might have been newly introduced into premature care. Vitamins were suspected very early. Although vitamins A, D, and C had been given for many years, water miscible multiple vitamin drops were new. Excesses of vitamin A were strongly considered as causative at one time, due to greater absorption from soluble vitamin mixtures. The tweening agents that make the vitamin drops water miscible were also considered. Lack of vitamin E was suspected because it was not in the vitamin preparations and low fat milk formulas were popular. Milk formulas themselves were held under suspicion because retrolental fibroplasia seemed to be less common in countries where breast milk was used exclusively for premature babies. The high electrolyte content of cows milk formulas has been considered as a causative factor.

At times various of these ideas seemed to be the correct answer, but the results could not be consistantly confirmed or reduplicated. Some even considered the bright lights in modern nurseries as possibly causative, but covering the babies eyes did not help any. The irregular geographic distribution of this condition from city to city and even between hospitals within cities became a puzzling problem that suggested infectious agents as possible causative. All of these studies and more were ably reviewed by Zacharias [3] in October, 1952.

Pathological Development

Retrolental fibroplasia as it was described by Terry and as it was seen by most early investigators was in the most advanced stages of development in infants several months of age. No one knew how it developed or when. The major question no one could answer was, whether it was present at birth either in its final form or in some beginning stage or not. To answer this question required careful study of the eyes of many premature infants from soon after birth on.

Many people worked on this problem, but one of the major reports was by Owens and Owens [4] in 1949. They firmly established the fact that retrolental fibroplasia developed in premature infants after birth and they described the stages of development of the condition as seen through the ophthalmoscope from its early beginnings to its advanced development. This information helped to focus our thinking primarily on some factor acting upon the infant after birth and allowed us to make a diagnosis in the earlier phases and thus more accurately pinpoint possible causes and evaluate preventive measures or treatments.

In 1952 Reese, Blodi, and Locke [5] described the early pathology of retrolental fibroplasia obtained by the pathological study of the eyes of many premature infants. Others confirmed their findings at about this same time. With this latter information it was then possible to define the pathological development of retrolental fibroplasia and therefore more carefully evaluate the experimental production of this lesion in animals.

Role of Oxygen Therapy

In the past four years more and more attention has been given to the role of oxygen therapy for premature infants as an etiologic agent of retrolental fibroplasia. Oxygen was being used in higher concentrations and for longer periods of time than ever before in the care of the premature. This was in large measure abetted by the newer incubators that more efficiently controlled the environment of the infant as to temperature, humidity and oxygen concentrations. Kinsey [6] in 1949 in a study of various factors in the care of the premature especially vitamin A and iron supplements definitely showed a relationship between an increased incidence in retrolental fibroplasia and an increased use of oxygen, as well as to the other items, but oxygen which was thought to be innocuous and life saving was considered the least likely cause.

However, by 1951 several authors were directing attention to intensive oxygen therapy as a possible causative factor in retrolental fibroplasia, particularly Campbell [7] in Australia and Szewczyk [8] in this country. The latter author was more interested in how the oxygen was administered than the concentration or duration of administration. In 1952 there were several more reports implicating oxygen as a causative factor. Patz and Hoeck [9] reported a clinical study using the usual high concentrations of oxygen in the control group and low concentrations of oxygen in an experimental group of premature infants. They demonstrated a decreased incidence of retrolental fibroplasia in the latter group. Ryan [10] in Australia indicated a sudden increase in incidence of retrolental fibroplasia in one hospital with the acquisition of modern more efficient incubators and he felt the increased oxygen concentrations were responsible. This same year Gyllensten and Hellstrom [11] in Sweden produced lesions similar to retrolental fibroplasia in experimental animals. Subsequently, in 1953 and 1954 Patz [12]

in this country and Ashton [13,14] in England produced eye lesions similar to retrolental fibroplasia in various experimental animals repeatedly with concentrations of oxygen above 40 percent. These developments are well reviewed by Henry.[15]

In 1954 Gordon [16] and Lanman [17] both reported clinical studies clearly indicating that oxygen used in concentrations of less than 40 percent definitely was related to a decreased incidence of retrolental fibroplasia as compared with control groups given greater amounts of oxygen.

It not only seems well established now that high oxygen concentrations can cause retrolental fibroplasia, but also that minimal use of oxygen does not compromise the survival or health of premature infants.[18] It is recognized that there may well be other causes of retrolental fibroplasia so that we may continue to see this condition, but it is probable that we can reduce the incidence enormously by the most conservative use of oxygen therapy for premature infants.

Bibliography

[1] Terry, T. L.: Extreme prematurity and fibroblastic overgrowth of persistent vascular sheath behind each crystalline lens. I. Preliminary report. Am. J. of Ophth., 25:203, February 1942.

[2] Terry, T. L.: Retrolental fibroplasia. Advances in Ped., Vol. III, p. 55, New York, Interscience Publishers, 1948.

[3] Zacharias, L.: Retrolental fibroplasia: A survey. Am. J. of Ophth., 35:1426, October 1952.

[4] Owens, W. C. and Owens, E. U.: Retrolental fibroplasia in premature infants, Am. J. of Ophth., 32:1, January 1949.

[5] Reese, A. B., Blodi, F. C. and Locke, J. C.: The pathology of early retrolental fibroplasia. Am. J. of Ophth., 35:1407, October 1952.

[6] Kinsey, V. E. and Zacharias, L.: Retrolental fibroplasia: Incidence in different localities in recent years and a correlation of the incidence with treatment given the infants. J. A. M. A., 139:572, February 1949.

[7] Campbell, K.: Intensive oxygen therapy as a possible cause of retrolental fibroplasia. A clinical approach. Med. J. Australia, 11:48-50, July 1951.

[8] Szewczyk, T. S.: Retrolental fibroplasia, etiology and prophylaxsis: A preliminary report. Am. J. Ophth., 34:1649, December 1951.

[9] Patz, A., Hoeck, L. E. and De La Cruz, E.: Studies on the effect of high oxygen administration in retrolental fibroplasia. I. Nursery observations. Am. J. Ophth., 35:1248-, 1952.

Viral Laboratory Receives Grant for Second Year of Polio Testing

The search for a simple diagnostic test for polio will continue in the laboratories of the California State Department of Public Health under a $23,149 grant from the National Foundation for Infantile Paralysis. The grant, effective July 1st, provides supplementary funds for the second year of a two-year grant.

The work is under the direction of Edwin H. Lennette, M.D., chief of the department's Viral and Rickettsial Disease Laboratory. Since 1952, Dr. Lennette and his associates have attempted to overcome one of the most formidable problems in fighting polio —diagnosing the disease in its early stages. Current research has led them to improving the complement-fixation test, a method similar to the Wassermann test for syphilis.

Early diagnosis of polio is extremely difficult, even for the most skilled physicians. At present, laboratory diagnosis takes days and sometimes a full week. If the complement-fixation test is perfected, it will make positive diagnosis simpler and cheaper.

[10] Ryan, H.: Retrolental fibroplasia, a clinico-pathologic study. Am. J. Ophth., 35:329, 1952.

[11] Gyllensten, L. J. and Hellstrom, B. E.: Retrolental fibroplasia, animal experiments. Acta Pediatrica, 41:577, November 1952.

[12] Patz, A., Higginbotham, D. and Kleh, T.: Oxygen studies in retrolental fibroplasia. II. Production of microscopic changes of retrolental fibroplasia in experimental animals. Am. J. Ophth., 36:1511, 1953.

[13] Ashton, N., Ward, B. and Serpell, G.: Role of oxygen in the genesis of retrolental fibroplasia. British J. Ophth., 37:513, 1953.

[14] Ashton, N., Ward, B. and Serpell, G.: Effect of oxygen on developing retinal vessels with particular reference to the problem of retrolental fibroplasia, British J. Ophth., 38:397, 1954.

[15] Henry, M.: Recent advances in retrolental fibroplasia. Calif. Med., 81:272, October, 1954.

[16] Gordon, H. H., Lubchenco, L. and Hix, I.: Observations on the etiology of retrolental fibroplasia. Bull. J. Hopkins Hosp., 94:34, 1954.

[17] Lanman, J. T., Guy, L. P. and Davies, J.: Retrolental fibroplasia and oxygen therapy. J. A. M. A., 155:223, 1954.

[18] Engle, M. A. and Levine, S. Z.: Response of small premature infants to restriction of supplementary oxygen. J. A. M. A. Dis. Child., 89:316, March 1955.

Public Health Positions

Butte County

Public Health Nurses: Two positions open. Generalized program, including services to schools. Salary, $315-$391. Optional, county car or 8 cents per mile. Write G. L. Faber, M.D., Director, Butte County Health Department, P. O. Box 1100, Chico.

Contra Costa County

Public Health Nurse: Salary, $357-$429. Filing deadline, July 29th. Requires California registration as R.N. and certification as a Public Health Nurse. Public Health Nurse candidates will be admitted to the examination, but must acquire P.H.N. certificate before employment. Write Civil Service Commission, Box 710, Martinez.

Marin County

Public Health Nurse: Position opening middle of August. Salary $322-$385. Car required, with mileage reimbursement. For further information write Carolyn B. Albrecht, M.D., Marin County Health Officer, 920 Grand Avenue, San Rafael.

Nevada County

County Sanitarian: Salary, $5,000 per year. Position open at once for experienced sanitarian, who will also act as health officer for Nevada City. Car required; mileage, 8 cents. Apply R. E. Deeble, County Clerk, Courthouse, Nevada City.

San Diego County

Public Health Bacteriologists: Salary range, $311-$378. Examination will consist of appraisal only. Applicants must possess a California Public Health Bacteriologist's Certificate. For details write San Diego Civil Service, Room 402, Civic Center, San Diego.

Public Health Veterinarian: Opening is for veterinarian to supervise county-wide program for prevention and control of animal diseases. This is a permanent civil service position with a salary range of $483-$587. Requirements, in addition to the license to practice veterinary medicine, are one year of recent experience and a master's degree in Public Health. Examination will consist of an appraisal. Write San Diego Civil Service, Room 402, Civic Center, San Diego.

San Jose

Public Health Nurse: San Jose City Health Department has opening for a staff nurse. Salary, $341-$426. Apply Civil Service Commission, 152 Park Avenue, San Jose.

Santa Barbara County

Public Health Nurse: Salary range, $307-$373. May start above minimum if qualifications and experience warrant. Applicant must possess a California R.N. license and P.H.N. certificate. Car furnished. For further information contact Mrs. Mary Felkins, Acting Director of Nurses, Santa Barbara County Health Department, P. O. Box 486, Santa Maria.

State-wide Health Survey Completed in May; Analysis of Data Now in Progress

On May 15, 1955, a one-year state-wide health survey was completed by the State Department of Public Health. This was the first such state-wide undertaking in the country, and the largest health survey of its kind since the mid-thirties when the national health survey was completed. Provisional data compiled in the survey already give some indication of the volume and nature of illness and disability in the population; during the coming fiscal year detailed analysis of the survey findings is expected to provide answers to many questions about the health of Californians.

Provisional data for the first 42 weeks of the survey show that each day during May, 1954, through January, 1955, on the average, 65 out of every 1,000 Californians were disabled because of illness or injury. (Days of disability, as counted in the survey include all days on which a person was kept in bed, kept from going out of doors, or otherwise kept from his usual activities because of illness or injury.) Of these 65 Californians, approximately three-fourths were disabled by chronic conditions. The remaining one-fourth of the disabled were affected by acute conditions, which were about evenly distributed between upper respiratory and gastro-intestinal illnesses.

Need for Morbidity Statistics

For some time the California State Department of Public Health and other agencies concerned with health have been acutely aware of the need for information regarding the health status of the population. Special studies have provided fragmentary data, but there has been little information on general morbidity.

Accordingly, the department in 1948 began to explore the possibilities of undertaking research in the measurement of general morbidity. Representatives of the California Medical Association, California Physicians' Service, Association of California Hospitals, University of California School of Public Health, Stanford University, California Conference of Local Health Officers, State Department of Employment, and the State Department of Industrial Relations agreed to serve as a project advisory committee. After two years of discussion and planning, the funds to begin the current project became available in May, 1950, through a grant from the National Institute of Health. The investigation proceeded in two phases: (1) a pilot project, and (2) a state-wide survey.

Phase One—The San Jose Study

Before starting the survey on a state-wide basis, a pre-test of alternate methods was conducted in San Jose in the spring of 1952. Variations in the household interview approach were used, and the results of the household survey were compared with data gathered from hospital records and other medical records in order to test their validity. Information gained from the pilot project in San Jose led to the choice of the procedures to be used in the state-wide project.

Phase Two—The State-wide Survey

Utilizing methods indicated by the San Jose pilot project, the state-wide health survey began in May, 1954, and continued until May, 1955. It embraced a sample of 12,000 households, or approximately 35,000 persons. The United States Bureau of the Census conducted the field work for the study according to specifications laid down by the California State Department of Public Health.

The survey obtained information on all types of illness or injury. In addition, information was gathered on such population characteristics as age, sex, marital status, occupation, urban or rural residence, and type of health insurance coverage.

The project staff is now laying plans for an intensive analysis of the survey and publication of results during the forthcoming fiscal year. It is anticipated that the state-wide morbidity survey will bring to light facts which will be of great value in answering such questions as:

1. What are the major and minor causes of illness today in California?
2. How much time is lost from work because of rheumatism, heart disease, diabetes, home accidents?
3. How many persons are there in California who require partial or complete nursing care?
4. What changes in health status occur after age 65?
5. How does hospitalization experience vary by age, sex, veteran status, health insurance coverage, and other population characteristics?
6. What kinds and amounts of illness occur in the various occupational groups?
7. How are smoking practices related to selected types of morbidity?
8. What is the volume of medical care services in the population, and how are they distributed with regard to type of service and place where medical attention is rendered?

The answers to these and other questions will aid physicians, voluntary agencies, and health departments in evaluating the progress being made in the reduction of specific diseases. Also, such information will yield indices of the health status of various population groups. Thus, morbidity information needs of a number of private and state agencies will be met.

New Films

The Bureau of Health Education, State Department of Public Health, has added the following to its lending film library since the revision of its 1955 film catalog. The catalog, currently being printed, will be available in August.

"Three to Make Ready" 16 mm. sound 45 min. 1955

A drama of total rehabilitation showing the client centered approach in returning the handicapped to happy and useful lives. Its purpose, according to the director of the Institute for the Crippled and Disabled, where the film was made, is to provide communities, government agencies, colleges and universities, organizations and institutions with a better understanding of the effectiveness, limitations and organizations of total rehabilitation.

"Preventing Fires in Your Home" Silent filmstrip 50 frames 1955

This color filmstrip is designed primarily for use with children in the upper elementary grades. Common hazards found in many homes are pointed out, and carefully devised questions aid pupils in learning how to correct dangerous conditions.

Department Studies Allocation Plan For Polio Vaccine Distribution

California is preparing for the allocation and distribution of poliomyelitis vaccine in accordance with national plans and proposed federal legislation now under consideration.

Governor Knight has designated the State Department of Public Health as the agency to direct shipment within California of this State's allocation of vaccine, when it becomes available. Dr. Malcolm H. Merrill, State Director of Public Health, has appointed an Allocations Subcommittee to work with the department on this project. This is a subcommittee of the department's Ad Hoc Advisory Committee on the Prophylaxis of Poliomyelitis.

Plans for allocation and distribution of the vaccine have two separate but related aspects:

1. One aspect is the national plan for voluntary allocation and distribution of all supplies of poliomyelitis vaccine to designated priority groups until the supply becomes more adequate. This program is to go into effect when contracts for the purchase of vaccine by the National Foundation for Infantile Paralysis are fulfilled.
2. The other aspect of the planning has to do with the premise of the Federal Government that all children should have opportunity to receive vaccination against poliomyelitis. Several pieces of legislation are before Congress now which would provide federal appropriations to assist states in the purchase of vaccine for this purpose. The Federal Government has also submitted a request for a supplementary budget appropriation for grants to states to assist in the cost of administering the polio vaccine program.

Audio-Visual Directory

The second edition of the *Audio-Visual Directory,* a complete resource directory of all types of A-V equipment, has recently been published by the National Audio-Visual Association, 2540 Eastwood Avenue, Evanston, Illinois. The cost is $3.50.

Historic Health Landmark— Gone, But Not Forgotten

(The following item on the razing of the old Los Angeles City Health Department Building was released recently by that department to Los Angeles newspapers. We thought you would be interested, too.)

The blot on the civic center landscape, the old health building at Temple and Main Streets, will soon be but a memory. Dr. George M. Uhl, City Health Officer, states that, as they have for some 27 years, many citizens are still coming to the old location for service. The City Hall garage guards direct half a dozen people every day to the new $3,500,000 facility at First and Main.

The pile of rubble, all that is left of the old 10-story landmark erected in 1907, has had a colorful history. Reputed to be one of the first earthquake-proof buildings in the city, it must also have been thought to be fireproof because it never had any fire escapes. It was first the International Savings & Exchange Building and later, Bank of America.

Nine years later when the city bought the property at the same time that the old Bullard Building was razed to make room for the present City Hall, it was to have suffered a similar fate. However, the health department had to move somewhere from the Bullard Building and it seemed like a good idea to move "temporarily," in 1927, to the old bank building with its old gas lights and telephone wiring strung on hooks in the hallways.

Twenty years later the voters made it possible for the city to comply with an unwritten agreement with the Federal Government that the building would be razed and the ground landscaped to beautify the area between the City Hall and the Federal Building. So, in May of 1947, they approved a $6,500,000 bond issue to provide for the new health building and six outlying health centers.

The 27-year-old "temporary" home has had a prolonged death, since it has taken close to six months to dismantle it. But it is being replaced by grass and flowers, and citizens passing on Temple Street will be able to see and read, for the first time, the engraving on the north entrance of the City Hall, "The Highest of All Sciences and Services—the Government."

Viral and Rickettsial Disease Laboratory Is International Training Center for Virologists

Because of its pioneer activities and unique position in the field of laboratory diagnosis of viral and rickettsial diseases, the Viral and Rickettsial Disease Laboratory of the State Department of Public Health has become, over the past five years, an internationally recognized center for the training of virologists. Virtually all of the training has been done under fellowships awarded to promising young men and women at the postdoctoral level.

Because of the importance of the tissue culture methods for the diagnosis and for the epidemiologic studies of poliomyelitis, the National Foundation for Infantile Paralysis is currently contemplating the awarding of fellowships and grants for the training of technicians, as well as medical people, and is anxious to have the department participate in whatever training program is developed. This is in recognition that the Viral and Rickettsial Disease Laboratory represents one of the few laboratories with adequate facilities, the necessary background and experience, and the highly trained personnel required for the performance of tests and procedures based on tissue culture methods.

Since 1949, a total of 22 fellows has spent from 3 to 12 months in the laboratory either learning diagnostic methods and procedures or actively participating in the development of such procedures or in investigative work being conducted by the department on problems of public health in California. The 22 fellows have come from Australia, Brazil, Chile, England, Germany, Greece, India, Italy, Japan, Korea, Mexico, Puerto Rico, Sweden, Turkey, United States, Venezuela, West Africa and Yugoslavia.

Fellowships were granted by the Rockefeller Foundation, Venezuelan Government, World Health Organization, Norwegian Research Council, Pan American Sanitary Bureau, U. S. Public Health Service, Fulbright International Grant-American Association of University Women and the United Nations Korean Reconstruction Agency.

In addition to the fellows, 29 visitors spent varying, but usually short,

intervals of time in this laboratory brushing up on new methods or developments.

They came from Canada, China, Egypt, Ethiopia, Manila, New Zealand, Philippines, and Uruguay as well as from the countries previously mentioned.

Finally, two individuals working for the degree of doctor of philosophy in bacteriology at the University of California in Berkeley received their entire technical and research training in the Viral and Rickettsial Disease Laboratory. One student, a colonel in the Medical Sanitary Corps of the United States Army, did research work on Q fever and his contributions to this field have been published in the medical literature, together with a compendium showing the world distribution of this disease in man, animals and arthropods. The second Ph.D. candidate came from Mexico and carried out a problem on the immunology and epidemiology of herpes simplex.

In general, the fellows working in the virus laboratory fall into two categories: those with little or no prior experience in virology, and those with considerable experience in the field or even with national or international reputations in this field. Those with no prior experience have been taught the fundamentals of virology, together with the basic techniques and methods used in diagnosis and their application to public health problems. Those with considerable experience in the field have generally come to observe the large-scale methods of diagnosis employed by our laboratory and to participate in the actual performance of the work so that they might acquire sufficient familiarity to introduce these methods in their home countries.

Since much of the training consists of the demonstration and teaching of techniques, as well as their practical performance, most fellows have not conducted what might be considered actual research. But their presence during the training period has helped to supply additional assistance in the performance of the tests. Such individuals have also, directly or indirectly, contributed to the development or improvements of techniques and methods, something which is constantly being worked on in a search for better tools for diagnosis. The more advanced fellows have contributed materially to our knowledge of public health. For example, one fellow participated in the preliminary and orientative work concerned with the possible development of a skin test for the detection of immunity to western equine encephalitis. Several others participated actively in the Q fever studies, both in the field and in the laboratory, because of the interest of their governments in this disease. Another, for example, participated in the early work on the development of an agglutination test for the viral encephalitides.

Among workers in the United States, nearly 70 percent of the deaths from accidents and more than half of the nonfatal disabling injuries occur off the job. The National Safety Council estimates that among the more than 60,000,000 employed men and women in the United States last year there were approximately 44,000 accidental deaths, and that only 14,000 of them arose out of and in the course of employment. Of the 4,300,000 nonfatal disabling injuries sustained by workers last year, nearly 2,500,000 were nonoccupational.—*Statistical Bulletin, Metropolitan Life Insurance Co., February, 1955.*

Entered as second-class matter Jan. 25, 1949, at the Post Office at Berkeley, California, under the Act of Aug. 24, 1912. Acceptance for mailing at the special rate approved for in Section 1103, Act of Oct. 3, 1917.

STATE DEPARTMENT OF PUBLIC HEALTH
BUREAU OF HEALTH EDUCATION
2151 BERKELEY WAY
BERKELEY 4, CALIFORNIA

printed in CALIFORNIA STATE PRINTING OFFICE

16551-C 7-55 9M